

**Remarks**

Claims 1-4 are pending in this application, with claim 1 being the only independent claim. No claim amendments are being made with this filing.

In order to overcome the objection to the Specification noted in the August 9, 2007 Office Action ("OA"), Applicants have amended the Specification by way of a substitute specification to correct grammatical errors. A clean copy of the amended Specification is included in the Appendix section of this paper.

In the OA, the Examiner objected to the drawings and required that the rotation axis of the wheel being oblique, as in claim 4, must be shown. Accordingly, Fig. 9 has been added in a new sheet in the Appendix following the clean copy of the substitute specification. This figure shows an oblique rotational axis, as recited in the specification and in claim 4. The figure does not add any new matter because it was supported by claim 4.

Claims 1-4 were rejected as being anticipated by U.S. Patent No. 4,950,130 to Erlach and U.S. Patent No. 1,579,146 to Richardson. The Applicants respectfully disagree with this rejection. The pending claims recite a water wheel having isobaric paddles. The Erlach and Richardson patents do not teach the use of a water wheel having isobaric paddles. Rather, the Erlach and Richardson patents are each concerned with water turbines, which are different from water wheels.

As evidence of the differences between water wheels and water turbines, the Examiner's attention is directed towards the attached Krizik Declaration. In that Declaration, Mr. Krizik, an inventor on this application, explains that one having ordinary skill in the art knows the difference between a water wheel and a water turbine, and recognizes them as different pieces of equipment. A water turbine transforms the kinetic water energy to mechanical energy. This occurs inside the housing of the turbine by changing the direction of the water flow by a combination of the turbine paddles or vanes and the housing of the turbine. The housing of the water turbine is an essential part of the turbine structure in order to reach the required operational parameters. Water turbines are intended for large water heads and high rotational speeds. Water wheels, on the other hand, do not use this effect. Rather, water wheels by their nature are designed for use with relatively small water heads, are low-speed, and do not utilize a housing to enclose

the area where they rotate. The paddles of a water wheel are immersed into flowing water, by which flow of water against the paddles creates energy that is transferred to the paddles and the wheel.

Further evidence that a water wheel and a water turbine are considered by one of ordinary skill in the art to be different from one another is attached as Exhibit C. A water turbine is clearly not a water wheel, and because the cited prior art only teaches water turbines and not water wheels, the claims cannot be anticipated. It is respectfully requested that all rejections under 35 U.S.C. § 102 be withdrawn.

It is further submitted that the pending claims are not obvious in view of the cited prior art. As explained in the Krizik Declaration, an isobaric paddle is configured in such a way that water flows onto the paddle only from one side of the paddle surface, and the shape of the paddle changes the direction of its speed vector in a direction as close as possible to 180° from the original water flow direction. The use of isobaric paddles on the water wheel, as specifically claimed in the present application, is a critical feature of the present invention, and it yields an unexpected result, as attested to in the Krizik Declaration. That is, isobaric paddles allow for efficient generation of energy by a water wheel, and this had not been achieved prior to the present invention. Accomplishing this without the use of a water turbine is significant, and all of the extra equipment and expense associated with a water turbine is avoided.

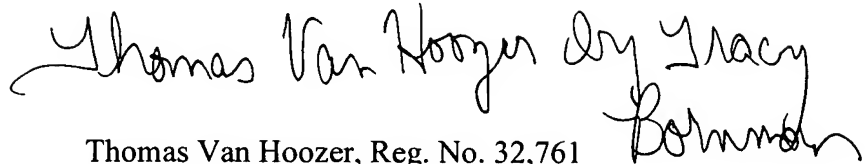
Dependent claims 2-4 are patentable for the same reasons set forth above with respect to claim 1.

In view of the foregoing, a Notice of Allowance appears to be in order and such is courteously solicited. Any fees due in connection with this request should be applied against Deposit Account No. 19-0522.

Respectfully submitted,

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**Appendix**

The following Appendix contains the substitute Specification.